

Ser. No. 10/527,956
Response dated January 7, 2011
Office Action dated September 14, 2010

CUSTOMER NO.: 24498
PU020426

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (Currently Amended) A method for providing video on demand playback, comprising:

receiving at a VoD player a plurality of program segments, each corresponding to a fractional part of an entire program, wherein program segments representing earlier portions of the program are transmitted to the VoD player more frequently than program segments representing later portions of the program;

storing at least portions of at least one of said plurality of program segments in a storage medium;

receiving at said VoD player a key table containing packet count information corresponding to the number of data packets contained in at least one of said program segments; and

identifying an end point of at least one of said plurality of program segments by counting a number of data packets that are decoded for playback.

2. (Original) The method according to claim 1 further comprising the step of counting a number of data packets relative to the beginning of a program segment.

3. (Previously Presented) The method according to claim 1 further comprising the step of associating at least one program segment with a unique program identifier based on information contained in said key table.

4. (Previously Presented) The method according to claim 1 further comprising the step of receiving and recording at said VoD player at least part of one of said plurality of program segments during the playback by said VoD player of a previous one of said plurality of program segments.

5. (Previously Presented) The method according to claim 1 further comprising the step of beginning a playback of at least one of said plurality of program segments responsive to a determination that a preceding one of said plurality of segments in said program is approaching said end point.

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6. (Previously Presented) The method according to claim 1 further comprising the step of receiving at said VoD player a segment packet count data for one or more of said plurality of program segments, said SPC data identifying a position within a program segment of a received packet containing program segment data.
7. (Previously Presented) The method according to claim 6 wherein said SPC data is private data in the adaptation field of the MPEG-2 transport.
8. (Previously Presented) The method according to claim 6 further comprising the step of monitoring said SPC field of data packets received at said VoD player.
9. (Previously Presented) The method according to claim 8 further comprising the step of comparing said SPC field data to a number of data packets contained in at least one of said plurality of program segments to identify the occurrence of missing packets.
10. (Previously Presented) The method according to claim 8 further comprising the step of discarding packets received by said VoD player that have SPC field data values corresponding to packets that have already been stored by said VoD player.
11. (Previously Presented) The method according to claim 8 further comprising the step of counting a number of data packets received by said VoD player for at least one of said plurality of program segments.
12. (Previously Presented) The method according to claim 11 further comprising the step of determining that a segment has been completely received when a total number of packets received for a segment is equal to a total number of packets for said segment as identified by said SPC data in said key table.
13. (Previously Presented) The method according to claim 12 further comprising the step of determining an end of a segment based upon a discontinuity in at least one of a system clock reference field and a presentation time stamp field.

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14. (Currently Amended) A method for providing video on demand playback, comprising:

defining a plurality of program segments, each corresponding to a fractional part of an entire program;

retrieving at least a portion of at least two of said plurality of program segments from a memory;

transmitting at least two of said plurality of program segments concurrently, with each program segment separately identifiable based upon a unique packet identifier; and

broadcasting one or more earlier ones of said plurality of segments, that chronologically are intended to precede later segments in said program, more frequently than said later segments.

15. (Previously Presented) The method according to claim 14 further comprising the step of broadcasting with at least one of said plurality of program segments a key table containing packet count information corresponding to the number of data packets contained in at least one of said program segments.

16. (Currently Amended) A video on demand player comprising:

demultiplexor means for demultiplexing a plurality of multiplexed program segments, each having a unique packet identifier and each corresponding to a fractional part of an entire program, wherein program segments representing earlier portions of the program are transmitted to the VoD player more frequently than program segments representing later portions of the program;

storage means for concurrently storing two or more of said plurality of program segments during a predetermined time period; and

means for receiving and storing a key table containing packet count information corresponding to a number of data packets contained in at least one of said program segments.

17. (Cancelled)

18. (Previously Presented) The VoD player according to claim 16 further comprising means for identifying at least one of a beginning and an end of one or more of said plurality of program segments using said packet count information.

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19. (Previously Presented) The VoD player according to claim 16 further comprising means for determining, based on said packet count information, when a complete set of program segment data packets has been received.
20. (Previously Presented) The VoD player according to claim 16 further comprising means for determining a playback order of said plurality of program segments based on said packet count information.
21. (Original) The VoD player according to claim 20 further comprising means for playing back in order and without interruption a first and all subsequent ones of said plurality of program segments.
22. (Previously Presented) The VoD player according to claim 16 further comprising means for receiving and storing at least a first program segment corresponding to a beginning portion of said entire program on at least one of a different transponder channel and at a different time as compared to a remainder of said program segments.
23. (Previously Presented) A VoD server comprising:
 - means for defining a plurality of program segments, each corresponding to a fractional part of an entire program;
 - means for multiplexed transmitting at least two of said plurality of program segments concurrently, with each program segment separately identifiable based upon a unique packet identifier; and
 - means for broadcasting one or more earlier ones of said plurality of segments, that chronologically are intended to precede later segments in said program, more frequently than said later segments.
24. (Previously Presented) The VoD server according to claim 23 further comprising means for broadcasting with at least one of said plurality of program segments a key table containing packet count information corresponding to the number of data packets contained in at least one of said program segments.
25. (Previously Presented) The VoD server according to claim 23 further comprising means for transmitting a segment packet count data for one or more of said plurality of program segments, said SPC data identifying a position within a program segment of a transmitted packet containing program segment data.

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26. (Previously Presented) The VoD server according to claim 25 wherein said SPC data is private data in the adaptation field of the MPEG-2 transport.

27. (Original) The VoD server according to claim 23 further comprising means for transmitting at least a first program segment corresponding to a beginning portion of said entire program on at least one of a different transponder channel and at a different time as compared to a remainder of said program segments.

28. (Previously Presented) The method according to claim 1, wherein the end point is identified when a count of a number of data packets that are decoded for playback and that correspond to the at least one of said plurality of programs equals the packet count information for the at least one of said program segments.